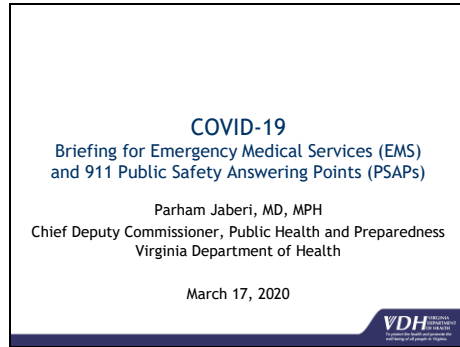


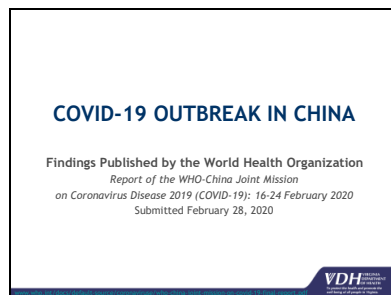
Slide 1



This guidance applies to all first responders, including law enforcement, fire services, emergency medical services, and emergency management officials, who anticipate close contact with persons with confirmed or possible COVID-19 in the course of their work.

Thank you for your service. EMS plays a vital role in responding to requests for assistance, triaging patients, and providing emergency medical treatment and transport for ill persons.

Slide 2



Slide 3

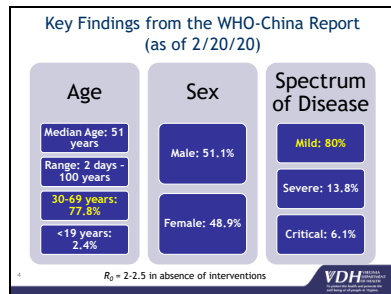
COVID-19 Signs and Symptoms among Confirmed Cases Reported in China

Sign or symptom*	%
Fever	87.9
Dry Cough	67.7
Fatigue	38.1
Sputum	33.4
Shortness of breath	18.6
Myalgia or arthralgia	14.8
Sore throat	13.9
Headache	13.6
Chills	11.4
Nausea or vomiting	5.0
Nasal congestion	4.8
Diarrhea	3.7

*Among 35,924 confirmed cases

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101 SOUTH MAIN STREET, SUITE 100
MONTPELIER, VT 05602
(802) 241-3000
www.vermont.gov/health

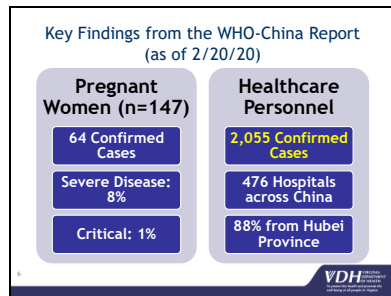
Slide 4



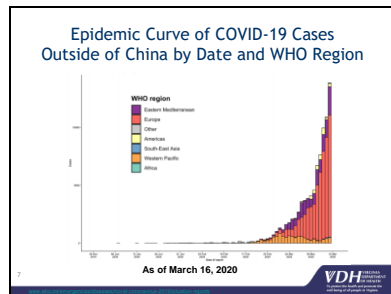
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Slide 6



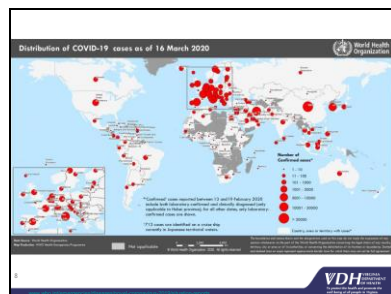
Slide 7



Confirmed cases through March 16

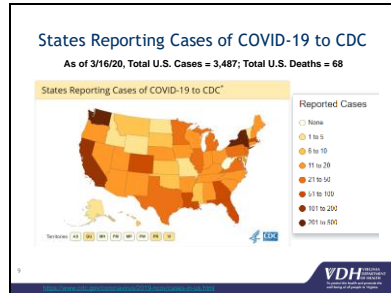
The total number of cases and deaths outside China has overtaken the total number of cases in China. Globally, 167,511 cases have been confirmed, including 6,606 deaths.

Slide 8



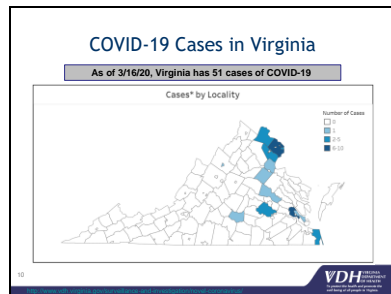
Confirmed cases through March 16

Slide 9



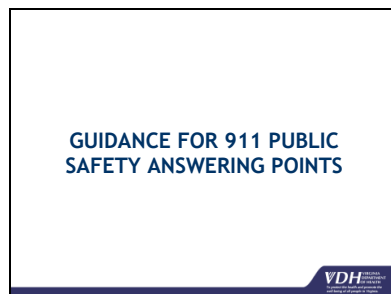
Confirmed cases through March 16

Slide 10



Confirmed cases through March 16

Slide 11



Slide 12

PSAPs or EMD Screening Patients with Respiratory Symptoms

- Have you travelled in the past two weeks, and if so where and when?
 - Stay informed with the updated [affected geographic regions](#)
- Did you have contact with someone confirmed to have COVID-19?
- Notify possible COVID-19 patients to EMS clinicians before arrival on scene
- Response to ill travelers at US international airports and other ports of entry should be notified to CDC quarantine station of jurisdiction for the port of entry

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Slide 13

Travel Notices and Restrictions (as of 3/16/20)

Warning Level 3	Alert Level 2	Watch Level 1
<ul style="list-style-type: none">• Recommendation• Avoid Nonessential Travel• China, Iran, Mainland Europe, United Kingdom and Ireland	<ul style="list-style-type: none">• Recommendation• Practice Enhanced Precautions• South Korea• Japan	<ul style="list-style-type: none">• Recommendation• Practice Usual Precautions• Global

- Reconsider all cruise ship voyages worldwide

Entry of most foreign nationals from these destinations has been suspended:

- China
- Iran
- Mainland Europe

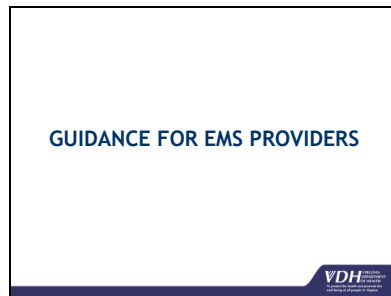
(1) www.cdc.gov/coronavirus/2019-ncov/travelers/index.html

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<https://www.whitehouse.gov/presidential-actions/proclamation-suspension-entry-immigrants-nonimmigrants-certain-additional-persons-pose-risk-transmitting-2019-novel-coronavirus/>

<https://www.dhs.gov/news/2020/03/11/homeland-security-acting-secretary-chad-f-wolf-s-statement-presidential-proclamation>

Slide 14



CDC EMS guidance updated
3/10/20.

Slide 15

COVID-19 Testing Availability	
Virginia Public Health Lab (DCLS)	Private Labs
<ul style="list-style-type: none">• Testing specimens as of February 29, 2020• VDH approval required - specimens should not be sent without approval• Specimen collection guidance available on DCLS website	<ul style="list-style-type: none">• Select private labs are able to perform testing as of March 6, 2020• VDH approval is not necessary• Contact your lab provider to determine testing availability

Slide 16

Interim VDH Testing Criteria (Revised 3/13/20)	
Clinical Features	Epidemiologic Risk
Fever OR signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath)	AND Any person, including healthcare personnel, who has had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset
Fever AND tested negative for influenza AND a respiratory virus panel negative for all pathogens AND without an alternative diagnosis	AND Person with clinically or radiographically diagnosed pneumonia requiring hospitalization
Fever OR signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath) AND tested negative for influenza AND a respiratory virus panel negative for all pathogens AND without an alternative diagnosis	AND Person residing in a nursing home or long-term care facility
More details can be found on the VDH Updated Testing Guidance	

Due to a limited number of tests available, testing performed at DCLS, Virginia's state lab, is reserved for patients who meet VDH's priority investigation criteria on this slide. Other patient's who need COVID-19 testing can be tested through a private lab.

Question: Is there an expedited process to test EMS providers and other healthcare personnel for COVID-19?


Answer: Symptomatic healthcare personnel meet the definition of close contact or exposure, and would be tested for COVID-19 by DCLS, the state public health lab.

Slide 17

Requirements to Care for Patients with Suspect or Confirmed COVID-19

- Providers to put on appropriate PPE **before** entering the scene
- Minimize contact with patient until a facemask is on the patient
- Drivers should wear all PPE if providing direct patient care
 - Remove and dispose of all PPE after care and before entering isolated driver's compartment
 - If no isolation compartment, driver should wear respirator/facemask during transport









Staff Trained On Recommended Personal Protective Equipment (PPE)



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Minimum PPE Requirements for Suspected or Confirmed COVID-19

EMS Providers in Close Contact	Patients
 Hand Hygiene	 Hand Hygiene
 Goggles or Face Shield	
 Gown	
 Gloves	
 N95 Respirator	
or	
 Facemask	 Facemask

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EMS clinicians who will directly care for a patient with possible COVID-19 infection or who will be in the compartment with the patient should use appropriate PPE.

An N95 or higher-level respirator should be used.

Facemasks are an acceptable alternative until the supply chain is restored.

Eye protection, gown, and gloves continue to be recommended.

Eye protection should cover the front and sides of the face. Personal eyeglasses and contact lenses are NOT considered adequate eye protection.

Change gloves if they become torn or heavily contaminated.


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**PPE Prioritization:
Aerosol-Generating Procedures**

Prioritize PPE if supply chain disruption:

- **N95 respirators** - aerosol-generating procedures
- **Gowns** - aerosol-generating procedures, activities where splashes and sprays are anticipated, high-contact patient activities

Once supply chain is restored, fit-tested EMS clinicians should return to use of respirators for patients with known or suspected COVID-19




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Respirators should be prioritized for procedures that are likely to generate respiratory aerosols.

If there are shortages of gowns, they should also be prioritized for aerosol-generating procedures, and activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of EMS clinicians (e.g., moving patient onto a stretcher)

Slide 20

Aerosol-Generating Procedures



- Exercise caution if procedures are necessary
 - Consult with medical control if possible
- Bag valve masks and other ventilator equipment should be equipped with HEPA filtration
- Rear doors of transport vehicle should be opened and HVAC system should be activated during aerosol-generating procedures
- Perform away from pedestrian traffic

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Clinical Management

- Currently no specific antiviral treatment
- Prompt infection prevention and control and supportive management of complications is recommended
- Patients with mild illness might not initially require hospitalization
- Signs and symptoms might worsen in 2nd week of illness
- Decision to monitor patient in an inpatient or outpatient setting is made on case-by-case basis
- Avoid corticosteroids unless indicated for other reasons

List of treatments and vaccines in development
www.clinicaltrialsarena.com/analysis/coronavirus-mern-cov-drugs/

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Vaccination and Treatment

- Clinical trials for treatment and vaccines in development
- **Treatment**
 - Currently no specific antiviral treatment
 - Supportive care
 - Research is ongoing
- **Vaccine**
 - Currently no vaccine
 - NIH research and development ongoing
 - Projected timeline = 12-18 months

List of treatments and vaccines in development
www.clinicaltrialsarena.com/analysis/coronavirus-mern-cov-drugs/

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Transporting Suspected COVID-19 Patients

If a patient with suspected or confirmed COVID-19 needs transported:

- Provide patient with a facemask
- Call ahead to receiving facility regarding symptoms and risk factors
- Keep the patient separated from other people as much as possible
 - Family members and other contacts of patients should not ride in the transport vehicle, if possible
 - If riding in transport vehicle, a facemask should be worn
- Contact your [local health department](#) to report suspected COVID-19 case
- Keep a log of all clinicians and providers and their level of patient contact

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Transporting Suspected COVID-19 Patients

- When possible, use vehicles that have isolated driver and patient compartments with separate ventilation to each area
- Close the door/window between these compartments before bringing the patient on board
- Vehicle ventilation in both compartments should be set on non-recirculated mode
 - Only an equipped supplemental recirculating ventilation unit that passes air through HEPA filters may be used for recirculation
- Use rear exhaust fan if equipped on vehicle
- If no isolated driver and patient compartments nor ventilation are present, open the outside air vents in the driver area and turn on the rear exhaust fans to the highest setting

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Documentation of Patient Care

- Should be done after EMS clinicians have completed transport, removed and discarded PPE, and performed hand hygiene
 - Written documentation should match verbal information given to ED providers at the time patient was transferred
- Include list of EMS clinicians and public safety providers involved in response and level of contact with the patient (e.g., no contact with patient, provided direct patient care)
 - This documentation may need to be shared with local public health authorities

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Cleaning EMS Transport Vehicles after Transporting Suspected COVID-19 Patients

- After transport, leave the rear doors of the vehicle open to allow for air changes. Doors should remain open during cleaning.
- When cleaning, wear PPE:
 - Disposable gown
 - Gloves
 - Face shield OR facemask + goggles, if splashes or sprays are anticipated
- Clean and disinfect the vehicle in accordance with SOPs
- Clean and disinfect reusable patient-care equipment
- Follow SOPs for disposal of used PPE and laundering used linen; avoid shaking the linen

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Environmental Cleaning

- Products with EPA-approved emerging viral pathogens claims are recommended for use against COVID-19
- Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, PPE)

Refer to [List N](#) on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2

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Guidance on Assessment and Monitoring of Healthcare Contacts

- If COVID-19 is identified, healthcare personnel are assessed and classified as high-, medium-, or low-risk depending on multiple factors
 - Exposure duration, patient symptoms, if patient was wearing facemask, aerosol-generating procedures, and type of PPE used by healthcare personnel
- Recommendations for monitoring for COVID-19 and work restrictions depend on exposure risk classification
- LHD will work with each facility to outline roles and responsibilities

VDH Healthcare Personnel Risk Assessment Tool

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EMS Employer Responsibilities

- EMS agencies should develop sick-leave policies for EMS personnel that are non-punitive, flexible, and consistent with public health guidance
- Equipment: Consult ventilator equipment manufacturer to confirm appropriate filtration capability and effect of filtration on positive-pressure ventilation

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Infection Prevention and Control Actions Needed Now

- Meet with staff to educate and train them on COVID-19 and what to do to prepare
 - Ensure staff are trained in correct use of PPE and respiratory protection device use
- Plan to optimize your facility's supply of PPE and EPA-registered hospital grade disinfectants due to ongoing shortages
 - Report any EMS facility supply chain issues to the Regional Healthcare Coalition

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Key Reminders

- All personnel should avoid touching their face while working
- Perform hand hygiene after removing PPE
- EMS personnel should be alert for fever or respiratory symptoms (e.g. cough, shortness of breath, sore throat)
 - If symptoms develop, self-isolate and notify occupational health services and/or LHD to arrange for appropriate evaluation

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Here are simple but key reminders for all staff.

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Help Counter Stigma

- Support people who are coming back to school or work after completing their quarantine or isolation period for COVID-19
- Maintain confidentiality of those seeking health care and those who are part of any contact investigation
- Raise awareness without increasing fear
- Share accurate information about how virus spreads
- Provide social support

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ADDITIONAL RESOURCES

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New or Updated CDC Guidance

Revised PUI Case Definition	Healthcare Infection Control Guidance	Healthcare Personnel with Potential Exposure Guidance
Pregnant Women and Children FAQs	Inpatient Obstetric Healthcare Guidance	Discontinuation of Transmission-based Precautions
HCP Preparedness Checklist and Tool	Strategies for Long-term Care Facilities	COVID-10 Publications

34 www.cdc.gov/coronavirus/2019-ncov/index.html

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VDH Resources for EMS Providers

Information for Healthcare Providers

- http://www.vdh.virginia.gov/content/uploads/sites/13/2020/03/Provider_FAQ_03082020.pdf

Interim Guidance for COVID-19 Testing

- http://vdhweb/epi/Novel%20Coronavirus_2019-nCoV/VDH%20Updated%20Guidance%20on%20COVID19%20Testing_03122020_final.pdf

Healthcare Personnel Risk Assessment Tool

- https://www.vdh.virginia.gov/content/uploads/sites/13/2020/03/VDH_COVID-19_Healthcare_Personnel_Risk_Assessment_Tool_3.8.2020.pdf

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EMS COVID-19 Resources

CDC COVID-19 Interim Guidance for EMS

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>

EMS Infectious Disease Playbook

- <https://www.ems.gov/pdf/ASPR-EMS-Infectious-Disease-Playbook-June-2017.pdf>

Criteria to Guide Evaluation of PUI for COVID-19

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html>

Interim Infection Control Guidance

- <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/index.html>

Strategies for Ensuring Healthcare Systems Preparedness and Optimizing N95 Supplies

- www.cdc.gov/coronavirus/2019-ncov/hcp/healthcare-supply-ppe.html

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CDC Patient Resources

COVID-19 Factsheet

- <https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet.pdf>

Steps to Prevent the Spread of COVID-19

- <https://www.cdc.gov/coronavirus/2019-ncov/about/steps-when-sick.html>

Travelers: Frequently Asked Questions and Answers

- <https://www.cdc.gov/coronavirus/2019-ncov/travelers/faqs.html>

People at Higher Risk and Special Populations

- <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/index.html>

Preventing the Spread of COVID-19 in Communities

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html>

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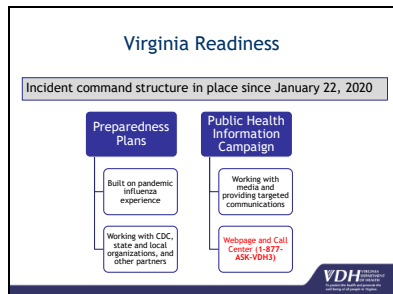
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PUBLIC HEALTH SYSTEM RESPONSE

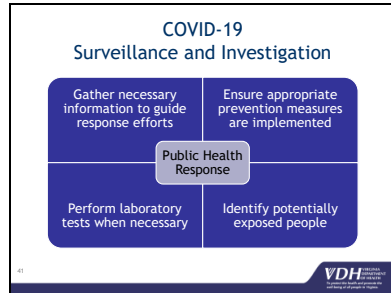
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Slide 40



Slide 41



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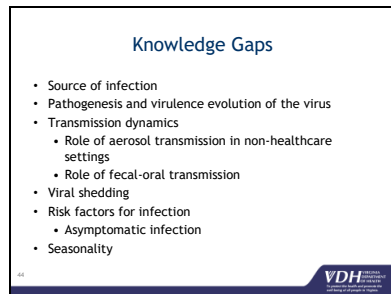


At an industry event sponsored by the U.S. Chamber of Commerce this week, David E. Short, deputy assistant secretary for aviation and international affairs, said the Trump administration has agreements in place with South Korea and Italy to screen passengers before they leave those countries.
<https://www.washingtonpost.com/transportation/2020/03/06/us-is-screening-travelers-china-iran-why-not-italy-south-korea/>

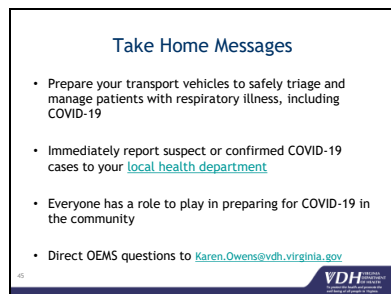
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General COVID-19 Resources

Virginia Department of Health (VDH)

- [35 Local Health Districts](#)
- www.vdh.virginia.gov/coronavirus

Centers for Disease Control and Prevention (CDC)

- COVID-19 Website: www.cdc.gov/coronavirus/2019-nCoV
- Health Alert Network (HAN): <https://emergency.cdc.gov/han/2020.asp>

World Health Organization (WHO)

- www.who.int/emergencies/diseases/novel-coronavirus-2019

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Thank you!

Please send questions to:

respiratory@vdh.virginia.gov

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